

Southern California

General Statistics

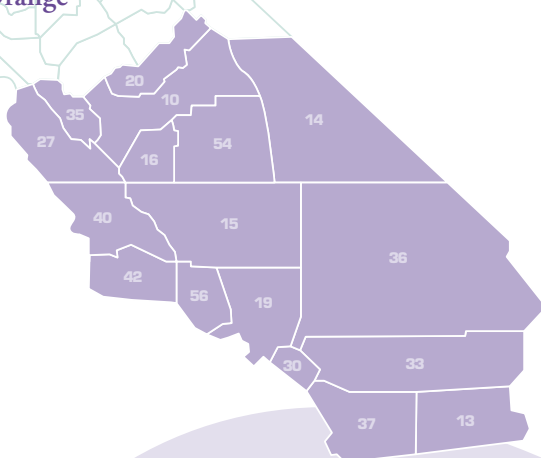


- Collision with another vessel was the most common type of accident, accounting for 45% of all Southern California accidents, compared with 28% in Northern California and 36% statewide.
- Inattention was a factor in 43% of all accidents in Southern California and was the most common cause of accidents.
- PWC were involved in 33% of all Southern California accidents, compared with 23% in Northern California and 28% statewide.
- 22% of Southern California accidents occurred during the three summer holiday weekends.



Includes accident statistics for the following Counties:

| | |
|-----------------|---------------------|
| 10. Fresno | 33. Riverside |
| 13. Imperial | 35. San Benito |
| 14. Inyo | 36. San Bernardino |
| 15. Kern | 37. San Diego |
| 16. Kings | 40. San Luis Obispo |
| 19. Los Angeles | 42. Santa Barbara |
| 20. Madera | 54. Tulare |
| 27. Monterey | 56. Ventura |
| 30. Orange | |

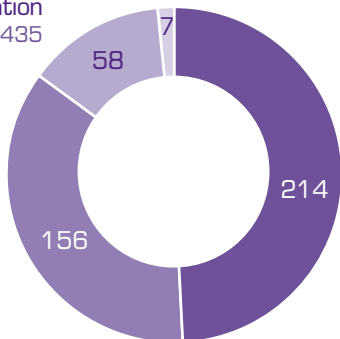


Southern California is defined as South of the Fresno and Monterey Bay areas.

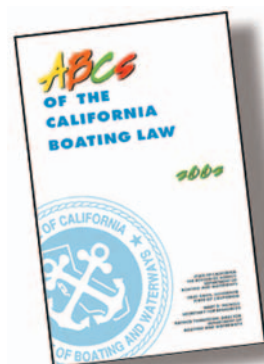
- Open motorboats were involved in 44% of all accidents in Southern California, compared with 57% in Northern California and 51% statewide.
- In Southern California, vessels colliding with other vessels accounted for 32% of fatalities, followed by vessels grounding (16%) and vessels capsizing (16%).
- In Southern California, open motorboats were involved in 68% of all fatal boating accidents, followed by PWC, which were involved in 24% of fatalities.
- In Southern California, 58% of victims died in alcohol-related accidents, where testing could be conducted.
- 52% of the victims drowned and 48% of the victims died of trauma-related injuries in Southern California, compared with 70% and 11% respectively in Northern California.

2002 Southern California Boating Accidents by Location

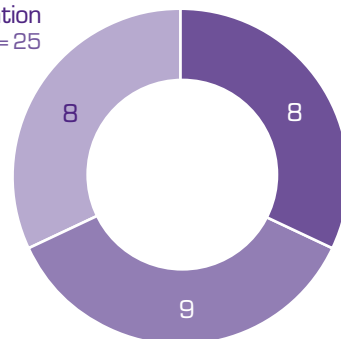
Accidents by Location
Total Accidents = 435



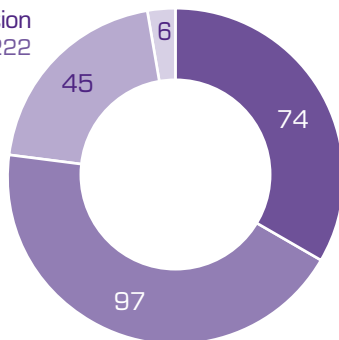
- Coastal Waters
- Lakes
- Colorado River
- Other Rivers



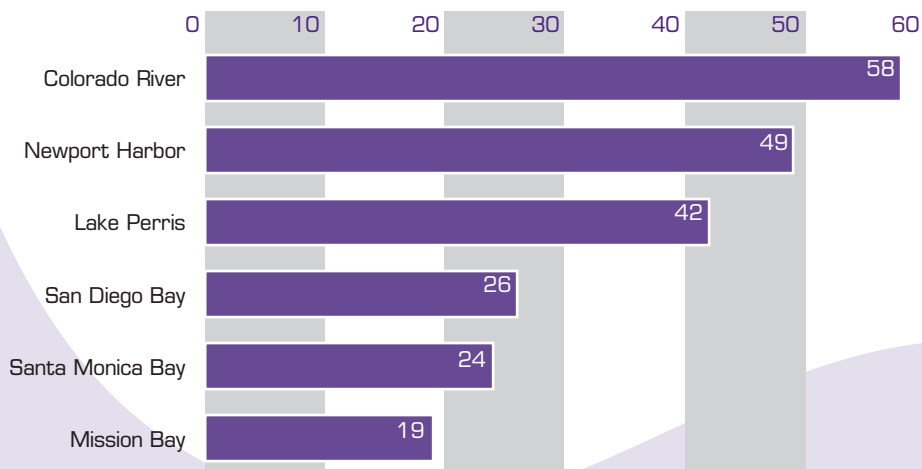
Fatalities by Location
Total Fatalities = 25



Injuries by Location
Total Injuries = 222



Top Six Southern California Boating Accident Areas



Inland Empire

General Statistics



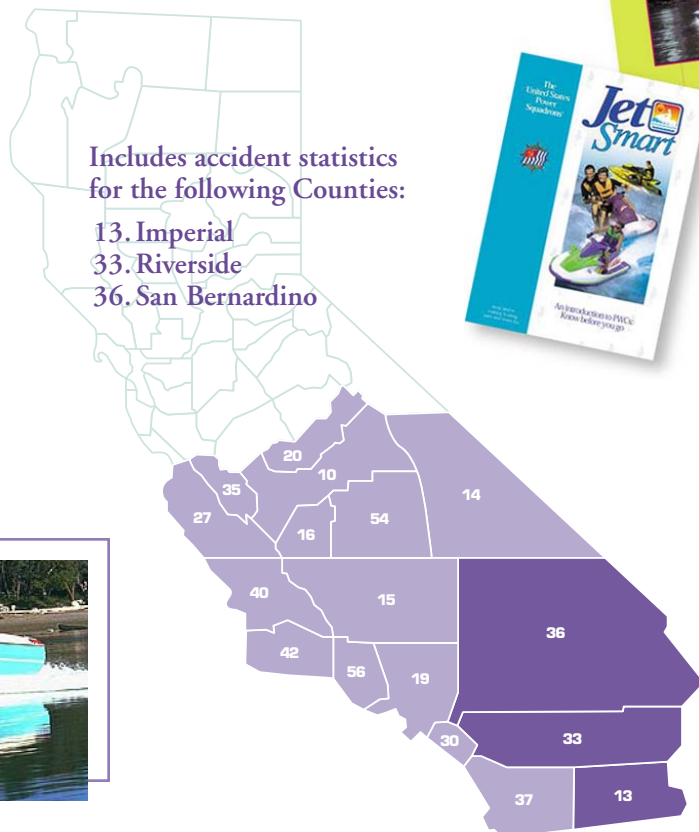
Accidents in the Inland Empire and surrounding areas accounted for 27% of accidents, 41% of injuries, and 35% of fatalities in Southern California.

Accidents in this region also represented 13% of accidents, 19% of injuries, and 15% of fatalities in California.

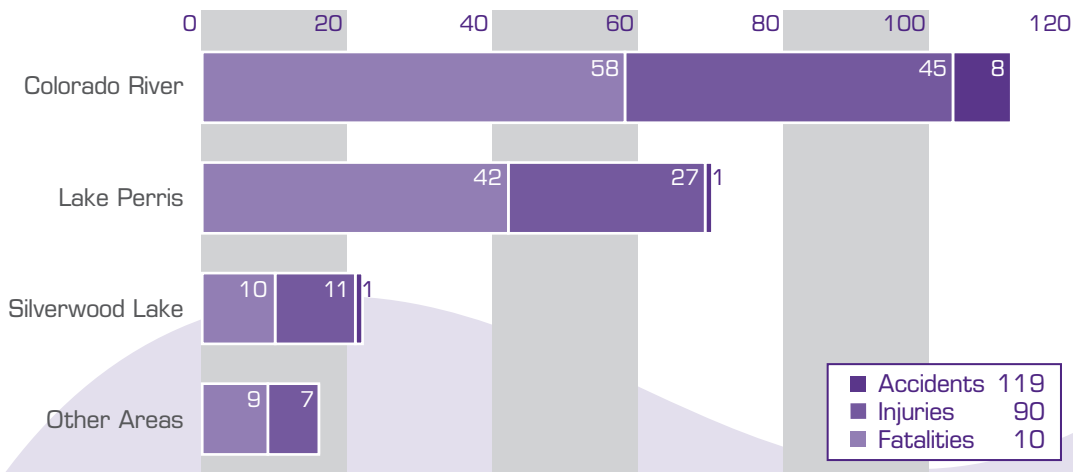
PWC-related accidents and accidents involving inattention and excessive speed were consistently higher in the Inland Empire than regionally or statewide. Noteworthy accident statistics are presented on the reverse.

Includes accident statistics for the following Counties:

13. Imperial
33. Riverside
36. San Bernardino



2002 Inland Empire Boating Accidents by Location



Noteworthy Accident Statistics

| Accidents Involving | Colorado River | So CA | CA |
|-----------------------|----------------|-------|-----|
| Causes | | | |
| Excessive Speed | 48% | 31% | 27% |
| Operator Inattention | 52% | 43% | 38% |
| Type of Vessel | | | |
| Open Motorboats | 66% | 44% | 51% |
| Personal Watercraft | 52% | 33% | 28% |
| Operator Age | | | |
| Under 18 | 20% | 11% | 10% |
| 40 and Under | 76% | 66% | 62% |
| Other Factors | | | |
| Holiday Weekends | 38% | 22% | 23% |

The Colorado River area accounted for 13% of boating accidents, 20% of injuries, and 35% of fatalities in Southern California (6% of accidents, 10% of injuries, and 15% of fatalities in California).

Only 11% of operators involved in accidents were from local communities bordering the river, either in California, Arizona, or Nevada. Accidents were more likely to involve excessive speed, younger operators, and occur on holiday weekends.

Accidents on Lake Perris accounted for 10% of all accidents in Southern California. Many involved PWC and collisions. Additionally, the percentages of accidents involving excessive speed, inattention, borrowed vessels, and operators aged 40 and under exceeded regional and statewide percentages.



| Accidents Involving | Lake Perris | So CA | CA |
|-------------------------|-------------|-------|-----|
| Types | | | |
| Collision with Vessel | 55% | 45% | 36% |
| Causes | | | |
| Excessive Speed | 50% | 31% | 27% |
| Operator Inattention | 50% | 43% | 38% |
| Type of Vessel | | | |
| Personal Watercraft | 67% | 33% | 28% |
| Vessels that are | | | |
| Borrowed | 45% | 28% | 25% |
| Operator Age | | | |
| 40 and Under | 81% | 66% | 62% |



| Accidents Involving | Silverwood Lake | So CA | CA |
|-------------------------|-----------------|-------|-----|
| Types | | | |
| Water Skiing | 20% | 10% | 13% |
| Causes | | | |
| Operator Inattention | 60% | 43% | 38% |
| Type of Vessel | | | |
| Personal Watercraft | 50% | 33% | 28% |
| Vessels that are | | | |
| Borrowed | 54% | 28% | 25% |
| Operator Age | | | |
| 40 and Under | 78% | 66% | 62% |

Accidents on Silverwood Lake reveal higher than average percentages of accidents involving personal watercraft, inattention, borrowed vessels, and water skiing activities.



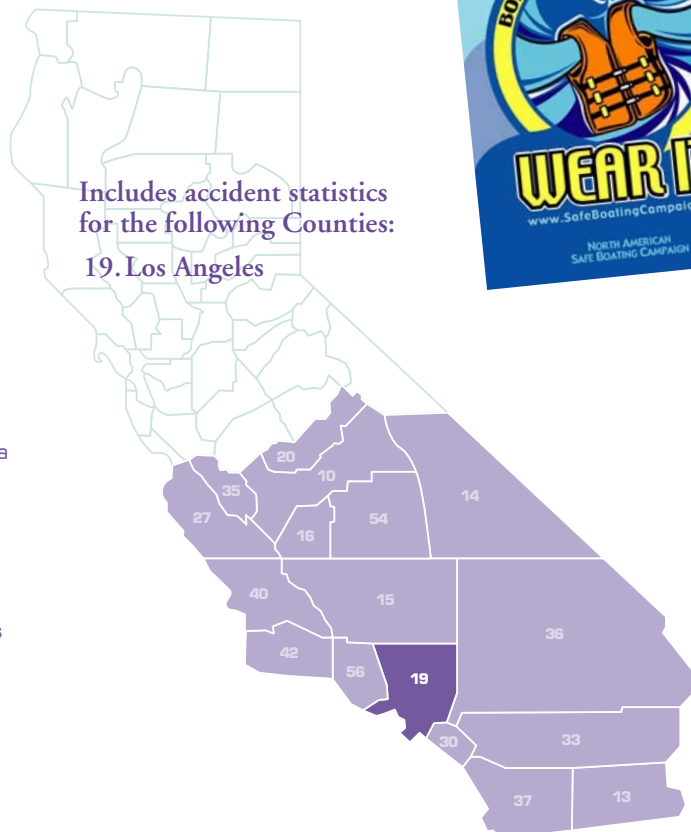
Los Angeles County

General Statistics

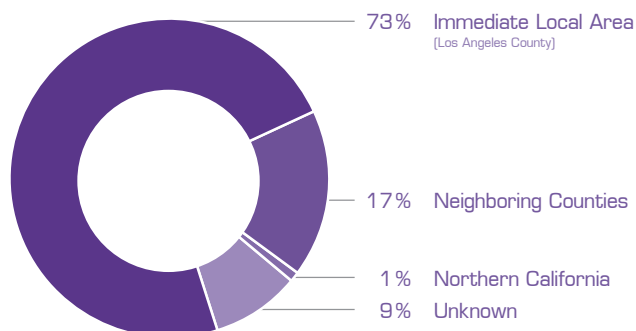


Los Angeles County accounted for 15% of accidents, 14% of injuries, and 9% of fatalities in Southern California.

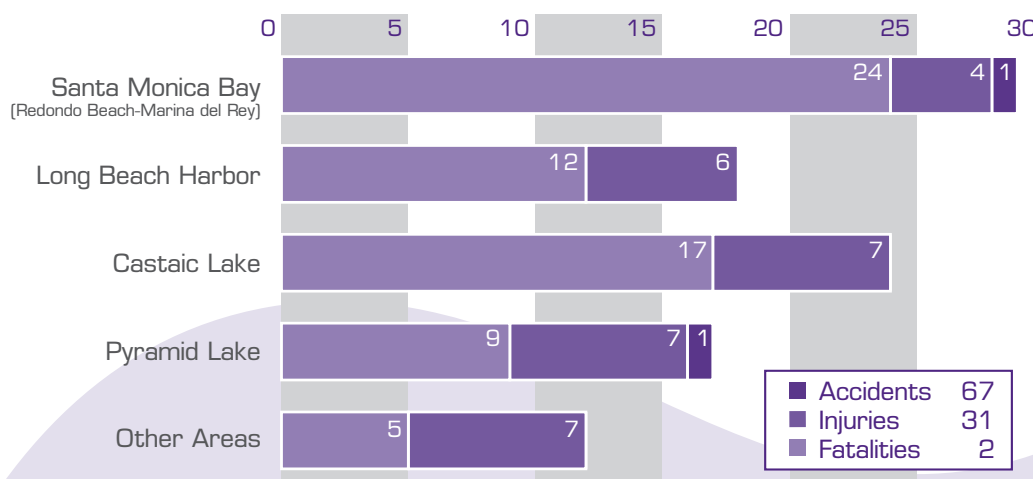
The vast majority (73%) of operators involved in accidents were from Los Angeles County. An additional 17% of operators were from the surrounding counties of Ventura, Orange, Riverside, and San Bernardino. Only 1 operator was from Northern California and none were from out of state.



Residence of Operators Involved in Accidents



2002 Los Angeles County Boating Accidents by Location



Noteworthy Accident Statistics



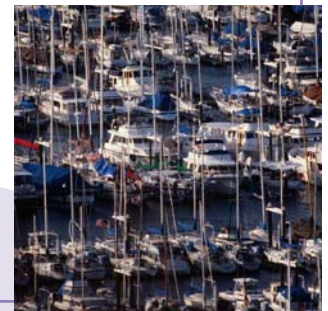
Accidents in the Santa Monica Bay and in the Long Beach area were similar in a number of ways. The accidents were more likely to involve cabin motorboats or auxiliary sailboats. Also, operators were more likely to be over 40 and also the owner of the craft.

| Accidents Involving | Santa Monica Bay | Long Beach | So CA | CA |
|-------------------------|------------------|------------|-------|------|
| Types | | | | |
| Grounding | 21 % | 17 % | 8 % | 11 % |
| Type of Vessel | | | | |
| Auxiliary Sailboats | 46 % | 33 % | 14 % | 10 % |
| Cabin Motorboats | 29 % | 58 % | 19 % | 16 % |
| Vessels that are | | | | |
| Operated by Owner | 58 % | 65 % | 47 % | 51 % |
| Operator Age | | | | |
| Over 40 | 71 % | 60 % | 34 % | 38 % |



| Accidents Involving | Castaic Lake | Pyramid Lake | So CA | CA |
|-----------------------|--------------|--------------|-------|------|
| Types | | | | |
| Collision with Vessel | 53 % | 67 % | 45 % | 36 % |
| Water Skiing | 12 % | 22 % | 10 % | 13 % |
| Causes | | | | |
| Operator Inattention | 41 % | 77 % | 43 % | 38 % |
| Operator Inexperience | 65 % | 33 % | 38 % | 36 % |
| Type of Vessel | | | | |
| Open Motorboats | 59 % | 44 % | 44 % | 51 % |
| Personal Watercraft | 47 % | 100 % | 33 % | 28 % |
| Operator Age | | | | |
| Under 18 | 21 % | 12 % | 11 % | 10 % |
| 40 and Under | 84 % | 82 % | 66 % | 62 % |

Accidents on Castaic Lake and Pyramid Lake reveal a number of similarities. On both bodies of water, the percentages of collisions, open motorboats, PWC, and operators 40 years of age and under all exceeded regional and statewide percentages.



Orange County

General Statistics



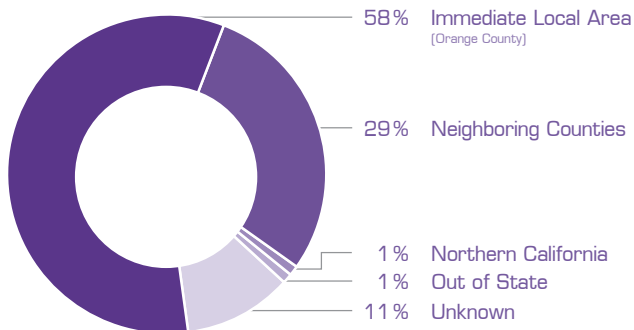
Accidents in Orange County represented 19% of accidents, 6% of injuries, and 13% of fatalities in Southern California.

The majority of operators involved in accidents (58%) were from Orange County. An additional 24% were from the neighboring counties of Riverside, San Diego, and Los Angeles.

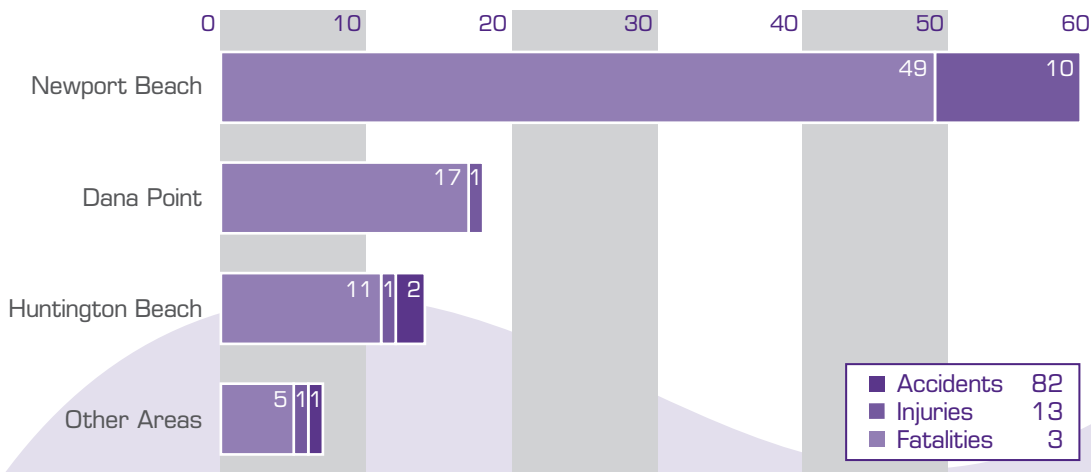
Although cabin motorboats were involved in 16% of accidents statewide and 19% in Southern California, they were involved in 52% of boating accidents in Orange County.



Residence of Operators Involved in Accidents



2002 Orange County Boating Accidents by Location



Noteworthy Accident Statistics



| Accidents Involving | Newport Beach | So CA | CA |
|-----------------------|---------------|-------|-----|
| Types | | | |
| Fires (all) | 12% | 5% | 6% |
| Flooding/Swamping | 35% | 14% | 12% |
| Causes | | | |
| Machinery Failure | 18% | 12% | 10% |
| Type of Vessel | | | |
| Cabin Motorboats | 49% | 19% | 16% |
| Operator Age | | | |
| Over 40 | 52% | 34% | 38% |

60% of the accidents in Orange County occurred in the Newport Beach area. The percentage of accidents in the Newport Beach Area that involved flooding/swamping, machinery failure, cabin motorboats, and operators over 40 all exceeded regional and statewide percentages.

Again, accidents involving machinery failure, cabin motorboats, and operators over 40 were common in Dana Point. Additionally, accidents involving collisions and auxiliary sailboats were also higher than in other areas of the county.

| Accidents Involving | Dana Point | So CA | CA |
|-----------------------|------------|-------|-----|
| Types | | | |
| Collision with Vessel | 47% | 45% | 36% |
| Causes | | | |
| Machinery Failure | 24% | 12% | 10% |
| Type of Vessel | | | |
| Auxiliary Sailboats | 29% | 14% | 10% |
| Cabin Motorboats | 65% | 19% | 16% |
| Operator Age | | | |
| Over 40 | 57% | 34% | 38% |



| Accidents Involving | Huntington Beach | So CA | CA |
|-----------------------|------------------|-------|-----|
| Types | | | |
| Flooding/Swamping | 18% | 14% | 12% |
| Grounding | 18% | 8% | 11% |
| Causes | | | |
| Machinery Failure | 55% | 12% | 10% |
| Type of Vessel | | | |
| Cabin Motorboats | 55% | 19% | 16% |
| Operator Age | | | |
| Over 40 | 50% | 34% | 38% |
| Other Factors | | | |
| Weekends | 73% | 56% | 57% |

Like the Newport Beach area, accidents involving flooding/swamping, machinery failure, cabin motorboats, and operators over 40 were also common. In addition, accidents involving grounding also exceeded regional and statewide percentages in Huntington Beach.



San Diego County

General Statistics

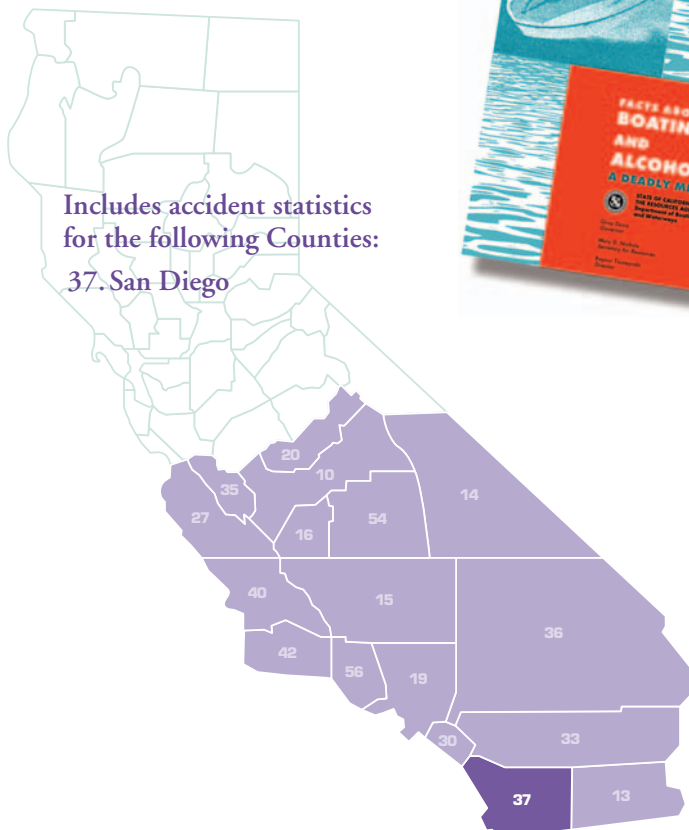


Accidents in San Diego County accounted for 18% of boating accidents in Southern California, 19% of injuries, and 13% of fatalities.

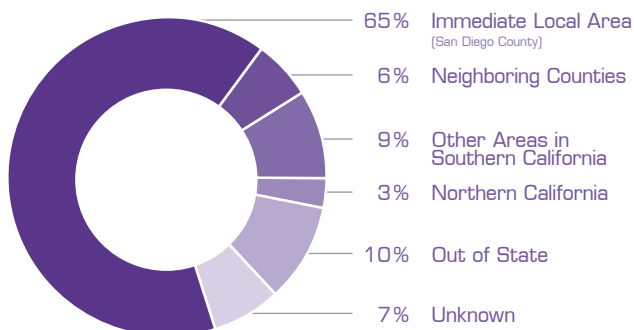
The majority of boating accidents (89%) occurred either in San Diego Bay, Mission Bay, or other areas along the coast.

The majority of operators (65%) involved in boating accidents were from San Diego County.

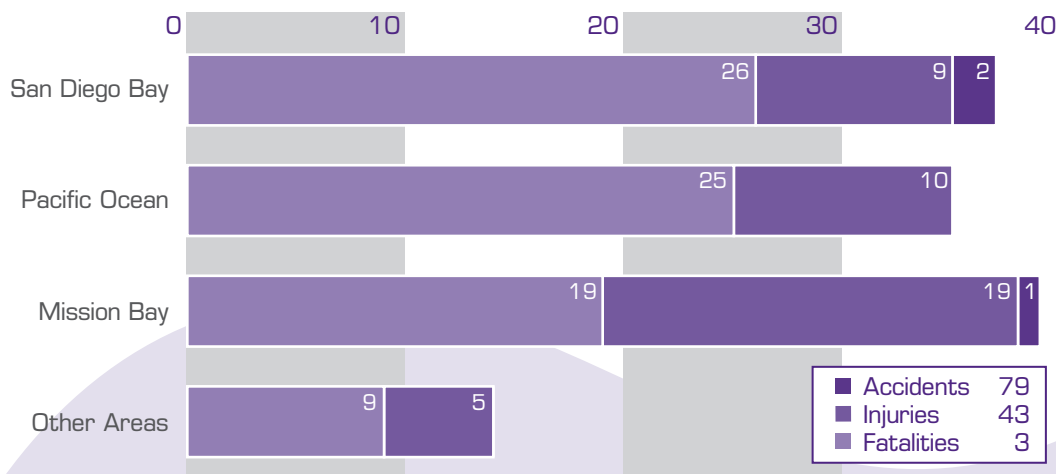
Of the vessels involved in accidents, 46% of were operated by the owner, 27% were borrowed, and 15% were rented. The remainder were unknown or had no operator.



Residence of Operators Involved in Accidents



2002 San Diego County Boating Accidents by Location



Noteworthy Accident Statistics

| Accidents Involving | San Diego Bay | So CA | CA |
|-----------------------|---------------|-------|-----|
| Types | | | |
| Capsizing | 12% | 6% | 7% |
| Collision with Vessel | 62% | 45% | 36% |
| Causes | | | |
| Machinery Failure | 26% | 12% | 10% |
| Operator Inexperience | 50% | 38% | 36% |
| Type of Vessel | | | |
| Cabin Motorboats | 38% | 19% | 16% |
| Operator Age | | | |
| Under 18 | 23% | 11% | 10% |

Accidents involving cabin motorboats were much more common in San Diego Bay than regionally or statewide. Additionally, operator inexperience, collisions, and vessels capsizing were common.



In the Pacific Ocean, capsizing and grounding were the most common types of boating accidents. Auxiliary sailboats were the most common type

of vessels involved in these accidents. The majority of operators involved in accidents were the owners of the vessels.



| Accidents Involving | Pacific Ocean | So CA | CA |
|-------------------------|---------------|-------|-----|
| Types | | | |
| Capsizing | 20% | 6% | 7% |
| Grounding | 20% | 8% | 11% |
| Causes | | | |
| Hazardous Weather/Water | 16% | 7% | 11% |
| Type of Vessel | | | |
| Auxiliary Sailboats | 32% | 14% | 10% |
| Vessels that are | | | |
| Operated by Owner | 66% | 47% | 51% |

| Accidents Involving | Mission Bay | So CA | CA |
|-------------------------|-------------|-------|-----|
| Types | | | |
| Collision with Vessel | 63% | 45% | 36% |
| Struck by Boat | 16% | 3% | 1% |
| Causes | | | |
| Excessive Speed | 68% | 31% | 27% |
| Operator Inattention | 74% | 43% | 38% |
| Type of Vessel | | | |
| Personal Watercraft | 79% | 33% | 28% |
| Vessels that are | | | |
| Rented | 26% | 9% | 10% |
| Operator Age | | | |
| Under 18 | 19% | 11% | 10% |
| 40 and Under | 74% | 66% | 62% |
| Other Factors | | | |
| Holiday Weekends | 35% | 22% | 23% |



PWC accidents were involved in 79% of all accidents in Mission Bay. The percentages of accidents involving rented vessels, operator inattention, excessive speed, and accidents on holiday weekends were also more common than regional or statewide percentages. The majority of operators involved in accidents were 40 and under.

Southern California

General Statistics



2002 Southern California Boating Accident Comparison

| Accidents Involving | CA | So CA | Colorado River | Lake Perris | Silverwood Lake | Santa Monica Beach | Long Beach | Castaic Lake | Pyramid Lake | Newport Beach | Dana Point | Hunt. Harbor | S. Diego Bay | Pacific Ocean | Mission Bay |
|-----------------------------|-----|-------|----------------|-------------|-----------------|--------------------|------------|--------------|--------------|---------------|------------|--------------|--------------|---------------|-------------|
| Types | | | | | | | | | | | | | | | |
| Capsizeing | 7% | 6% | 2% | 2% | 10% | 8% | 0% | 0% | 0% | 4% | 6% | 0% | 12% | 20% | 5% |
| Collision with Vessel | 36% | 45% | 48% | 55% | 30% | 46% | 42% | 53% | 67% | 29% | 47% | 18% | 62% | 16% | 63% |
| Falls Overboard | 7% | 5% | 10% | 2% | 10% | 0% | 0% | 12% | 0% | 2% | 0% | 9% | 4% | 4% | 11% |
| Fires (all) | 6% | 5% | 3% | 1% | 0% | 8% | 17% | 12% | 0% | 12% | 6% | 9% | 4% | 0% | 0% |
| Flooding/Swamping | 12% | 14% | 3% | 14% | 20% | 13% | 17% | 12% | 0% | 35% | 18% | 18% | 8% | 20% | 5% |
| Grounding | 11% | 8% | 9% | 0% | 0% | 21% | 17% | 0% | 11% | 8% | 12% | 18% | 4% | 20% | 0% |
| Struck by Boat | 1% | 3% | 3% | 0% | 10% | 0% | 0% | 0% | 11% | 0% | 0% | 0% | 0% | 4% | 16% |
| Water Skiing | 13% | 10% | 9% | 14% | 20% | 0% | 0% | 12% | 22% | 0% | 0% | 0% | 0% | 0% | 11% |
| Causes | | | | | | | | | | | | | | | |
| Excessive Speed | 27% | 31% | 48% | 50% | 40% | 4% | 17% | 29% | 44% | 4% | 6% | 9% | 17% | 16% | 68% |
| Hazardous Weather/Water | 11% | 7% | 2% | 7% | 0% | 4% | 0% | 0% | 0% | 8% | 6% | 9% | 0% | 16% | 0% |
| Machinery/Equipment Failure | 10% | 12% | 10% | 0% | 20% | 13% | 8% | 6% | 0% | 18% | 24% | 55% | 26% | 16% | 5% |
| Operator Inattention | 38% | 43% | 52% | 50% | 60% | 42% | 25% | 41% | 77% | 29% | 29% | 18% | 35% | 32% | 74% |
| Operator Inexperience | 36% | 38% | 38% | 38% | 50% | 25% | 8% | 65% | 33% | 16% | 29% | 9% | 50% | 48% | 47% |
| Restricted Vision | 6% | 3% | 7% | 2% | 10% | 13% | 17% | 0% | 0% | 6% | 0% | 0% | 4% | 12% | 5% |
| Type of Vessel | | | | | | | | | | | | | | | |
| Auxiliary Sailboats | 10% | 14% | 0% | 0% | 0% | 46% | 33% | 0% | 0% | 14% | 29% | 9% | 8% | 32% | 0% |
| Cabin Motorboats | 16% | 19% | 2% | 0% | 0% | 29% | 58% | 6% | 11% | 49% | 65% | 55% | 38% | 12% | 0% |
| Houseboat | 4% | <1% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Open Motorboats | 51% | 44% | 66% | 53% | 50% | 42% | 17% | 59% | 44% | 33% | 0% | 36% | 23% | 44% | 26% |
| Personal Watercraft | 28% | 33% | 52% | 67% | 50% | 4% | 0% | 47% | 100% | 0% | 12% | 0% | 15% | 16% | 79% |
| Vessels that are | | | | | | | | | | | | | | | |
| Borrowed | 25% | 28% | 38% | 45% | 54% | 11% | 12% | 23% | 67% | 15% | 12% | 15% | 17% | 17% | 38% |
| Operated by Owner | 51% | 47% | 46% | 36% | 46% | 58% | 65% | 54% | 22% | 44% | 28% | 69% | 42% | 66% | 35% |
| Rented | 10% | 9% | 8% | 9% | 0% | 3% | 0% | 15% | 6% | 6% | 8% | 0% | 14% | 10% | 26% |
| Operator Age | | | | | | | | | | | | | | | |
| Under 18 | 10% | 11% | 20% | 12% | 11% | 0% | 0% | 21% | 12% | 3% | 0% | 0% | 23% | 0% | 19% |
| 40 and Under | 62% | 66% | 76% | 81% | 78% | 29% | 40% | 84% | 82% | 48% | 43% | 50% | 58% | 62% | 74% |
| Over 40 | 38% | 34% | 24% | 19% | 22% | 71% | 60% | 16% | 18% | 52% | 57% | 50% | 42% | 38% | 26% |
| Other Factors | | | | | | | | | | | | | | | |
| Holiday weekends | 23% | 22% | 38% | 24% | 0% | 29% | 0% | 12% | 22% | 20% | 0% | 9% | 15% | 29% | 35% |
| Weekends | 57% | 56% | 67% | 64% | 50% | 58% | 33% | 59% | 67% | 51% | 41% | 73% | 38% | 56% | 50% |

